

ART. XVI.—*Notes on Australian and Tasmanian Scydmaenidae,
with Descriptions of New Species.*

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[Read November 12th, 1914].

No family of beetles of equal extent in Australia and Tasmania has been so much neglected as the *Scydmaenidae*. Probably this has been largely on account of the unsatisfactory descriptions by the late Rev. R. L. King. So that, apart from the species named by him, very few have been recorded from Australia. The references are as follows:—

1. King, Trans. Ent. Soc. N.S. Wales, I., pp. 91-99.
2. Macleay, *l.c.* II., p. 155.
3. Sharp, Trans. Ent. Soc. London, 1874, p. 515.
4. Lea, Proc. Roy. Soc. Victoria, 1905, p. 377.
5. Lea, *l.c.* 1907, p. 153.
6. Lea, *l.c.*, 1910, pp. 181-189.
7. Lea, Proc. Linn. Soc. N.S. Wales, 1911, p. 456.

Some years ago I carefully examined all of King's and Macleay's types, now in the Australian Museum; and received from that institution most of their species. But for these circumstances I should probably have had to pass over all but a few of the species here described.

On preparing to work at a particular group of insects I usually write to many of my entomological correspondents, requesting the loan of specimens of the group; but with the *Scydmaenidae* the species in external appearance are so much alike, and the preparatory work is so extensive¹, and often unsatisfactory,² that I felt indisposed to do so in this instance. Mr. H. H. D. Griffith, however, allowed me to examine his collection of the family, and to retain such specimens as I desired. From Mr. H. W. Davey and others some ants' nest species were obtained, but these were noted elsewhere;³ a few were obtained from correspondents in the ordinary course of exchange, and a few sent from the British Museum for

1. The majority of Australian collectors at present, unfortunately, seldom set out the legs and antennae of their beetles.

2. With single specimens it is often difficult to judge whether the absence of clothing from certain parts may be natural or due to abrasion.

3. In Proc. Roy. Soc. Victoria, 1910, pp. 181-189.

examination. I also examined all the Australian specimens of the family in the Macleay Museum, but as most of these were taken many years ago, and many are unique and difficult to clean, many were returned unnamed. Some of my own specimens are also left unnamed, although almost certainly new.

The majority of the specimens from New South Wales were taken during floods, and it is likely enough therefore that some of them are ants' nest species. From Tasmania a large percentage of the species were taken from mosses, lichens and tussocks;¹ and it is extremely probable that when mosses, etc., are well worked in other parts of Australia, undescribed species will be obtained in abundance. So far New South Wales and Tasmania are the only two States that have been (comparatively) well worked for species of the family.

Heterognathus armitagei, King.

Of this species King says, "Thorace fossula transversa basali"; on a co-type before me, however, there is at the base of the prothorax a close series of punctures, but they are separated, and not combined to form a transverse depression, although at a hasty glance they appear to be so.

Heterognathus gracilis, King.

Additional localities for this species are Tweed River, Forest Reefs and Glen Innes.

Heterognathus geniculatus, King.

Additional localities for this species are Glen Innes and Forest Reefs.

Heterognathus robustus, n.sp.

Of a rather dark reddish castaneous, suture slightly infuscated. Rather densely clothed with suberect, stramineous pubescence or short hairs.

Head moderately wide, with small, partially concealed punctures. Eyes of medium size, latero-frontal and fairly prominent. Antennae, for the genus, rather stout; club conspicuously three-jointed. *Prothorax* moderately convex, about as long as wide, sides rather strongly rounded, but becoming oblique to base; punctures very indistinct. *Elytra* rather short and wide, across base wider than widest part of prothorax, but across middle not

1. Some of these also are perhaps inquilines, as many ants are to be taken in such situations.

twice as wide; sides rather strongly and evenly rounded, with small, dense punctures, only partially concealed by clothing. *Legs* rather long and stout; hind coxae moderately separated. Length, 2 mm.

Hab.—Queensland; Mulgrave River (H. Hacker).

A robust, densely pubescent species, allied to *gracilis*, but larger and stouter, and elytra with dense and fairly distinct punctures. Considerably stouter than *carinatus*, ninth joint of antennae larger, and prothorax not carinated, etc.

The second-eighth joints of antennae are of almost even width, but gradually decrease in length, from slightly longer than wide to moderately transverse, the ninth joint is somewhat smaller than the tenth, and about twice as long and twice as wide as the eighth, the eleventh is subconical, slightly wider and distinctly longer than the tenth.

Two rather dirty specimens from Brisbane, in the Macleay Museum, probably belong to this species, but differ in having the abdomen slightly less convex; the clothing also is somewhat sparser, but this is probably due to abrasion.

Scydmaenus kingensis, Lea.

Tasmanian specimens of this species have the longitudinal impression on each side of the suture, near the base more distinct than on the type; so that conjoined they appear as a rather large depression, with the suture elevated in the middle of same. The antennae were originally described as with the "last four (joints) forming an elongate and loosely jointed club." Having had occasion to examine many species recently, this now appears incorrect to me, and the joints should be regarded as subcontinuous, and not forming a club; a distinction readily apparent on examining numerous species, whose antennae have the two, three, or four apical joints conspicuously clavate.

Scydmaenus gulosus, King.

This species may be taken in abundance during floods on several New South Wales rivers. There is also a specimen in the Macleay Museum from South Australia, and two from Victoria.

On most of the specimens the head and prothorax are of a deep shining black, but two specimens in the Macleay Museum from Sydney and Ash Island, and one in my own collection from Windsor, have the parts named not much darker than the elytra.

The front tibiae are dilated only in the male.

Scydmaenus parramattensis, King.

Additional localities for this species are Clarence River, Windsor and Tamworth.

Scydmaenus clarus, n.sp.

♂ Bright reddish castaneous; head prothorax and suture somewhat darker than elsewhere; palpi and tarsi flavous. Sides at base of head, and sides of prothorax, with moderately dense, flavous hairs; rest of upper surface entirely glabrous.

Head transverse; obtusely bilobed between antennae. Eyes small and prominent. Antennae rather long; club four-jointed. *Prothorax* about as long as wide, moderately convex; each side of base with a small deep fovea, the outer basal margins also foveate. *Elytra* at base scarcely wider than base of prothorax, sides dilated to near the middle; and then rounded to apex; basal impressions wide and conspicuous. *Metasternum* rather widely concave at middle of apex. *Legs* rather long; hind coxae rather distant; femora rather stout, the front pair stouter than the others. Length $1\frac{3}{4}$ mm.

♀ Differs in having the metasternum depressed only in middle of extreme apex, femora thinner and antennae somewhat thinner and shorter.

Hab.—Tasmania: Mount Wellington, Frankford, from fallen leaves and moss. (A. M. Lea.)

In appearance fairly close to *glabripennis*, but antennae rather stouter, and prothoracic impressions and clothing different.

At a glance the club appears to be subcontinuous with the other joints of the antennae, but the eighth joint is longer and suddenly (although not much) wider than the seventh, although as the following joints slightly increase in width, and the seventh is itself slightly wider than the sixth, the clubbing is not so pronounced as in many other species. The basal foveae of the prothorax from most directions appear to be completely isolated, but from others a vague connecting depression is visible; the outer ones are quite concealed from above.

On this and on all the following species of the genus the elytral punctures are so extremely sparse and faint that they are quite useless for purposes of identification; on the head and prothorax, if present at all, they are seen with difficulty, and only from certain directions.

Scydmaenus seminiger, n.sp.

Black; elytra dark castaneous, suture still darker, under surface dark reddish-brown or black, abdomen generally pale; legs and palpi flavous, antennae somewhat darker. Upper surface glabrous, except for numerous hairs at sides of prothorax, and a fascicle on each side of base of head.

Head moderately transverse, convex, rounded between antennae. Eyes small and prominent. Antennae moderately long and rather thin; club conspicuously four-jointed, but seventh joint distinctly longer and wider than sixth, although decidedly narrower and slightly shorter than eighth. *Prothorax* about as long as wide; base with two small deep foveae. *Elytra* rather wide and depressed; base slightly wider than base of prothorax, the basal impressions comparatively small; sides gently dilated to beyond the middle, and then regularly rounded to apex. *Legs* moderately long, hind coxae moderately separated; front tibiae somewhat inflated towards apex in male. Length, $1\frac{1}{4}$ mm.

Hab.—Victoria (Macleay Museum), Portland (H. W. Davey); N.S.W. : Forest Reefs; Tasmania : Jordan River, abundant in flood debris, New Norfolk, in tussocks, Hobart, in moss, Launceston (A. M. Lea).

The size and outlines are almost exactly as in *bifasciculatus*, but the colours and habits are very different. In general appearance, colours, etc., it is much like *glabripennis* in miniature; *gulosus* is frequently like it in colour, but is considerably narrower, with the elytra clothed. The black head and prothorax readily distinguish it from most of the species having the elytra glabrous.

The prothoracic foveae from some directions appear to be connected together by a strong transverse impression, but from other directions this impression appears rather faint; from some it causes the base to appear quadrifoveate.

Some specimens, from the Tweed River, differ in having some sparse straggling hairs about the basal third of the elytra, but I can find no other differences.

Scydmaenus fimbriicollis, n.sp.

Bright castaneous, elytra (suture not at all) very little paler than head and prothorax, antennae somewhat paler; femora and tibiae almost, the tarsi and palpi quite, flavous. Upper surface glabrous, except for numerous stramineous hairs at sides of prothorax, and a small fascicle on each side of base of head.

Head moderately transverse, feebly bilobed between antennae. Eyes small and very prominent. Antennae rather long; club four-jointed. *Prothorax* about as long as wide; base with two small, deep and rather distant foveae. *Elytra* at extreme base no wider than base of prothorax; sides moderately dilated to just before the middle, thence narrowed to apex. *Legs* rather long; hind coxae separated almost the width of impression at apex of metasternum. Length, $1\frac{1}{3}$ mm.

Hab.—Tasmania: Jordan River, in flood debris, Hobart, Mount Wellington, in moss, Waratah. (A. M. Lea.)

Larger than *castaneoglaber*, elytra slightly longer in proportion, and prothorax conspicuously fringed. *Bifasciculatus*, which has a similar fringe, is shorter, with wider elytra and slightly shorter and thinner antennae. In general appearance rather like small specimens of *clarus*, but antennae thinner, although not longer, the joints of the club less closely articulated, and basal impressions of prothorax not quite the same.

The club is certainly four-jointed, but as its joints slightly increase in width, and as the seventh is distinctly wider and somewhat longer than the sixth, from some directions it almost appears to be five-jointed. From some directions a rather shallow impression connecting the prothoracic foveae is visible; but from others these appear to be completely isolated.

Scydmaenus flavoapicalis, n.sp.

Bright castaneous; elytra slightly paler, but becoming flavous at apex; legs and palpi flavous. Clothing as in preceding species.

Head moderately transverse; rounded between antennae. Eyes rather small and prominent. Antennae rather thin; club distinctly four-jointed. *Prothorax* slightly wider than long, with two deep basal foveae. *Elytra* moderately wide, at base slightly wider than base of prothorax, sides regularly rounded and widest just before middle. *Legs* long; hind coxae moderately separated. Length, $1\frac{1}{4}$ mm.

Hab.—N.S. Wales: Ropes Creek, Sydney (Macleay Museum), Clarence River, Forest Reefs, Tamworth, Windsor (A. M. Lea.)

Slightly larger than *castaneoglaber*, and prothoracic impressions connected across base; that species also has not a conspicuous lateral fringe of hairs. From the preceding species it differs in being slightly smaller, elytra rather less narrowed at base, and antennae shorter and thinner.

The flavous portion of the elytra varies from about one-fifth to about one-third; although very distinct, it is not sharply limited. The prothoracic foveae from some directions appear to be connected by a strong transverse impression; from other directions, however, the impression seems rather feeble, although it is always traceable.

Numerous specimens differ in having the head and prothorax almost or quite black, and such specimens sometimes have the apex of elytra scarcely flavous; but, as I can find no differences in clothing or structure, I presume they represent varieties only. They are coloured much as *seminiger*, except that the under surface is not dark; but their size is very slightly, although consistently, smaller than that of that species, and are also somewhat narrower.

Scydmaenus flavipes, n.sp.

Bright castaneous; elytra (suture excepted) somewhat paler; legs and palpi flavous. Clothing as in two preceding species.

Head (excluding neck) almost as long as wide, bilobed between antennae. Eyes small and moderately prominent. Antennae long and thin; club conspicuously four-jointed. *Prothorax* slightly longer than wide; depressed; base with two small deep foveae, with a conspicuous connecting impression. *Elytra* flat and comparatively narrow; widest about middle; basal impressions rather small. *Legs* long; hind coxae moderately separated. Length $1\frac{1}{4}$ mm.

Hab.—W. Australia: Swan River. (A. M. Lea.)

A small, depressed species, narrower than most of those having glabrous elytra. Except for the glabrous elytra, which, however, are rather wider, it is much like *atrophus*.

Scydmaenus subglabripennis, n.sp.

Castaneous, elytra (suture excepted) somewhat paler; legs and palpi flavous. Upper surface glabrous, except for numerous stramineous hairs at sides of prothorax, a few about base (including sides) of elytra, a few at sides of head, and a fascicle on each side of its base.

Head moderately transverse, rather strongly rounded between antennae. Eyes (for the genus) rather large. Antennae rather long and thin; club four-jointed. *Prothorax* about as long as wide, moderately convex; base with two small deep foveae. *Elytra* rather short and wide; at base distinctly wider than prothorax,

and thrice as wide about the middle. *Legs* long; hind coxae moderately separated. Length, $1\frac{1}{3}$ mm.

Hab.—Queensland: Dalby. (Mrs. F. H. Hobler.)

The outlines are much as in *glabripennis*, but the colours and clothing are different, and club somewhat thinner, etc. The elytral clothing, although not dense, is fairly distinct, so I think it should not be placed with the species having glabrous elytra.

The seventh joint of the antennae is distinctly longer and wider than the sixth, but as it is very decidedly narrower and shorter than the eighth, it cannot be regarded as forming part of the club. The basal foveae of the prothorax are connected by an impression that from some directions appears to be deep and distinct, but from others is scarcely traceable.

Scydmaenus obscuricornis, n.sp.

Dark reddish castaneous; suture and eighth, ninth and tenth joints of antennae deeply infuscated; legs rather dark, tarsi and palpi pale, but scarcely flavous. Elytra with sparse, suberect, and moderately long, pale hairs; prothorax densely clothed at sides, and glabrous elsewhere; head very sparsely clothed, but with a loose fascicle on each side of base.

Head almost as long as wide; feebly bilobed between antennae. Eyes rather small and moderately prominent. Antennae rather long and thin; club conspicuously four-jointed. *Prothorax* about as long as wide; foveae and connecting impression as in preceding species. *Elytra* moderately long, at extreme base no wider than prothorax, sides regularly rounded and widest at about middle. *Legs* long; hind coxae moderately separated; femora subclavate. Length, $1\frac{1}{3}$ mm.

Hab.—Tasmania: Hobart (A. M. Lea).

In size and shape like *insigniventris*, but club dark and otherwise different. The depression connecting the foveae together is very shallow (it is quite invisible from certain directions), and very different to that of *dentiventris*. The elytra are decidedly narrower than in the preceding species, and the club is much darker. The outlines are somewhat as in *Kingensis*, but the antennae and clothing are different. The outlines approach those of *glabripennis*, but that species has the elytra entirely glabrous, and head and prothorax much darker.

The seventh joint of the antennae is very little longer or wider than the sixth, and is only about half the width of the eighth.

A specimen, taken from under rotting leaves in the National Park (N. S. Wales), appears to belong to this species, but differs in having the elytral clothing confined to the basal third (perhaps from abrasion), and the elytra, under surface and legs somewhat paler.

Scydmaenus brevisetosus, n.sp.

Bright reddish-castaneous, elytra very little (the suture not at all) paler than head and prothorax; legs and palpi flavous. Elytra with very short and indistinct, but almost evenly distributed setae (scarcely pubescence); sides of prothorax with rather dense stramineous hairs, similar hairs forming a fascicle on each side of base of head.

Head about as long as wide, feebly bilobed between antennae. Eyes small and prominent. Antennae comparatively short and stout; club distinctly four-jointed. *Prothorax* slightly transverse; each side of base with two small foveae. *Elytra* at base slightly wider than prothorax; basal impressions smaller than usual; sides moderately dilated to near the middle, and then narrowed to apex; *Legs* rather long and stout; hind coxae moderately separated. Length, $1\frac{1}{4}$ mm.

Hab.—Tasmania: Mount Wellington, four specimens from moss. (A. M. Lea.)

The elytra at first appear to be glabrous, but on looking at them sideways some very fine suberect setae become noticeable. The first, second and eleventh joints of the antennae are longer than wide, all the others being transverse, the eighth, ninth and tenth are fully twice as wide as long; the seventh is just perceptibly longer and wider than the sixth. The prothoracic foveae are all connected together by a transverse impression that varies, according to the point of view, from faint to strongly defined; the lateral foveae are only partially visible from above, but from the sides each is seen to mark the base of a longitudinal impression.

Scydmaenus brevipilis, n.sp.

Bright reddish-castaneous elytra (suture excepted), very little paler; legs almost, the tarsi and palpi quite flavous. Elytra with short and rather sparse, but very distinct pale pubescence; prothorax with dense hairs at sides, and a few at base and sides of disc, but middle of disc glabrous; head with a small loose fascicle on each side of base, and sparsely clothed elsewhere.

Head slightly longer than wide, somewhat rounded and flattened between antennae. Eyes small and rather prominent. Antennae rather long and thin; club four-jointed. *Prothorax* distinctly longer than wide, rather convex; base with two rather large foveae. *Elytra* moderately long, extreme base no wider than prothorax, but almost twice as wide across middle. *Legs* long; hind coxae rather widely separated; femora subclavate. Length, $1\frac{3}{4}$ mm.

Hab.—Tasmania: Mount Wellington, Waratah, common in moss and fallen leaves. (A. M. Lea.)

About the size of *tenuicornis*, but rather narrower, antennae not abnormally long, and elytral clothing unusually short for the family. It is, however, more noticeable than in the preceding species, from which it also differs in being larger, appendages longer and thinner, and prothorax not quite the same. From *Phagonophana abundans*, the most abundant of all the moss frequenting species in Tasmania, it is readily distinguished by its smaller size, distinctly clubbed antennae, and shorter clothing.

The seventh joint of the antennae is slightly wider but no longer than the sixth; and decidedly narrower than the eighth; the latter is slightly narrower, but no shorter than the ninth, the two following combined are about as long as the eleventh. The prothoracic foveae are larger and closer together than usual; they are connected by a transverse impression that varies in apparent depth with the point of view; each also is more or less distinctly connected with a lateral fovea, or longitudinal impression, that is quite invisible from directly above.

Scydmaenus tenuicornis, n.sp.

♂ Castaneous, elytra scarcely or not at all paler than elsewhere; antennae and legs somewhat paler, tarsi and palpi flavous. *Elytra* with fairly numerous, and rather long, suberect pale hairs; prothorax rather densely clothed at sides, but greater portion of disc glabrous; head sparsely clothed and without fascicles.

Head moderately transverse; feebly impressed between antennae. Eyes of moderate size, but very prominent. Antennae unusually long and thin; club four-jointed. *Prothorax* slightly longer than wide, widest across apical third; with two large basal foveae, and a smaller longitudinal one on each outer margin, the four more or less distinctly connected by a transverse impression. *Elytra* rather long, at extreme base slightly narrower than widest part of prothorax, sides evenly rounded and widest almost in exact middle. *Metasternum* flattened along middle or very feebly concave. Abdo-

men with fourth segment concave in middle, the concave portion bounded on each side by a conspicuous ridge that terminates as an obtuse tooth. *Legs* long; hind coxae moderately separated; femora subelavate; front tibiae hooked at apex. Length, $1\frac{4}{5}$ mm.

♀ Differs in having the metasternum gently convex, abdomen with fourth segment simple, head bifasciculate, antennae and legs somewhat shorter, and front tibiae not hooked.

Hab.—Tasmania: Stanley, in tussocks on summit of "Nut," Hobart, in fallen leaves, Huon River. (A. M. Lea.)

The long and thin antennae, with peculiar abdomen and front tibiae of the male, render this species very distinct. Each joint of the antennae is at least twice as long as wide, except the three basal joints of the club, which, however, are distinctly longer than wide; the seventh is about as long as the eighth, but distinctly narrower.

Scydmaenus dentiventris, n.sp.

♂ Dark castaneous, elytra somewhat paler, antennae slightly paler than elytra, legs somewhat paler still, tarsi and palpi flavous. Elytra with moderately long and rather sparse stramineous hairs; on prothorax and head somewhat shorter and darker, on the former condensed at sides, and on the latter forming a loose fascicle on each side of base; abdomen more densely pubescent than usual.

Head moderately transverse, flattened between antennae. Eyes moderately large and rather prominent. Antennae long and thin; club distinctly four-jointed. *Prothorax* feebly transverse; base foveate and impressed. *Elytra* moderately wide and rather depressed, base wider than prothorax, sides evenly rounded, and widest across middle. *Metasternum* rather convex. Abdomen with fourth segment tridentate. *Legs* rather long; hind coxae rather distant; front trochanters triangularly dentate. Length, $1\frac{1}{2}$ mm.

♀ Differs in having fourth segment of abdomen simple, front trochanters unarmed, and eleventh joint of antennae shorter.

Hab.—Tasmania: Hobart, from sods of grass, Huon River, in tussocks, Swansea, Stanley; N. S. Wales: Glen Innes, Tamworth, Wollongong, Windsor (A. M. Lea), Nepean River (A. J. Coates).

The colour is much as in the typical form of *gulosus*, and in general appearance it is close to *latebricola*, but readily distinguished from these by the basal impressions of prothorax, and the abdomen. The teeth on the abdomen of the male are of even length, and very much smaller than in *insigniventris*, with the outer ones more distant from the margins. Seen directly from above, the

fourth segment appears bifoveate, with the teeth marking the boundaries of the foveae; looking at them, from the direction of the head they appear as three rather acute teeth; from some directions they appear as short acutely terminated ridges, on the same plane as the base of the segment.

The seventh joint of the antennae is slightly larger than the sixth, and conspicuously smaller than the eighth, the eighth, ninth and tenth are each slightly dilated to the apex, the eleventh is slightly longer than the ninth and tenth combined. The basal prothoracic foveae and the connecting impression are somewhat variable, the foveae sometimes are rather large, shallow, and two in number, with the connecting impression rather feeble. On other specimens the impression appears more distinct, and with two or four foveate expansions. It is connected on each side with a longitudinal impression that is quite invisible from above.

One of the Hobart specimens has the elytra darker than the others, and with a faint infuscation along suture. The Swansea ones are also so coloured. Two females from Cunnamulla (Qld.), taken by Mr. Hardcastle, appear to belong to the species, but are of a rather light castaneous, with the elytra still paler. A specimen from South Australia, in the Macleay Museum, appears to belong to the species, but is abraded; and, as it is somewhat dirty, I have not been able to examine it satisfactorily.

Scydmaenus tridentatus, n.sp.

♂ Bright castaneous, head and prothorax somewhat darker than elsewhere, tarsi and palpi flavous. Clothing much as in preceding species.

Head moderately transverse, very feebly bilobed between antennae, with two very indistinct impressions close to each eye. Eyes small and prominent. Antennae slightly shorter, but otherwise much as in preceding species. *Prothorax* lightly transverse; base foveate and transversely impressed. *Elytra* moderately wide, and gently convex, base distinctly wider than prothorax, sides regularly rounded and widest just before middle. *Abdomen* with fourth segment armed. *Legs* rather long; front coxae rather distant; femora stout, especially the front pair. Length, $1\frac{3}{4}$ mm.

♀ Differs in having the antennae shorter, front femora not quite so stout, and abdomen unarmed.

Hab.—W. Australia: Swan and Vasse Rivers. (A. M. Lea.)

The teeth on the fourth segment of the abdomen of the male are intermediate between those of *insigniventris* and *dentiventris*, differing from the former in being shorter, not quite as close to the margins, on the same plane as the base of the segment, and the median tooth quite distinctly a tooth, and not a slight thickening of a membranous flap, although remnants of such a flap are present. From the latter species it differs in the outer teeth being decidedly longer than the middle one, more distant from each other, and conspicuously projecting as teeth over the fifth segment. To see them most clearly they should be examined from the direction of the head, as, in this species and in *dentiventris*, they are somewhat obscured by clothing.

The base of the prothorax is transversely impressed, with the impression foveate, but the depressed parts are somewhat obscured by clothing.

A female, possibly belonging to this species, differs in being somewhat wider, elytra more densely clothed, head with rather dense clothing across base, and femora and tibiae almost flavous.

Scydmaenus fimbriatus, n.sp.

Of a rather dingy castaneous, suture somewhat darker than rest of elytra; tarsi and palpi flavous. Elytra with rather short and depressed stramineous hairs, prothorax rather densely clothed at sides, and sparsely elsewhere; not at all on middle of disc; head sparsely clothed, except at sides and in middle of base, where the clothing is dense.

Head feebly transverse; moderately bilobed between antennae. Eyes small and moderately prominent. Antennae moderately long; club conspicuously four-jointed. *Prothorax* lightly transverse; base foveate. *Elytra* not very wide, base distinctly wider than prothorax, sides regularly rounded and widest across middle. *Legs* rather long; hind coxae moderately separated; femora subclavate. Length, $1\frac{3}{4}$ mm.

Hab.—N. S. Wales: Ourimbah, from rotting leaves. (A. M. Lea).

The general shape and appearance is much like that of *Heterognathus robustus*, but the club is distinctly four-jointed. At a glance it appears close to the preceding species, but the bases of the prothorax and elytra are different; the elytra and their clothing are not as in *brevipilis*.

The cephalic fascicles are not separated the entire width of the base, but appear extended round and almost drawn together, caus-

ing the head to be more densely clothed at the base than is usual, so that it is really without true fascicles. The seventh joint of the antennae is very little larger than the sixth, and not half the width of the eighth, the latter is practically the same size as the ninth or tenth. These combined are the length of the eleventh. At the base of the prothorax there are two small round foveae, somewhat closer together than is usual; there is also another fovea on each margin, but partly visible from above; all four are connected by an impression that varies in apparent depth according to the point of view; the lateral foveae are each connected by an oblique impression. The elytra are supplied with fairly numerous punctures, of small size certainly, but readily visible under a Coddington lens, in which respect they differ from the other species here described.

Scydmaenus amplipennis, n.sp.

♂ Bright castaneous, head and prothorax somewhat darker than elsewhere, tarsi and palpi flavous. Elytra with rather sparse and not very long stramineous hairs; prothorax not very densely clothed at sides, and glabrous elsewhere; head very sparsely clothed and without fascicles.

Head slightly longer than wide, feebly bilobed between antennae. Eyes small and prominent. Antennae moderately long; club inconspicuously four-jointed. *Prothorax* distinctly longer than wide; base with two somewhat irregular foveae. *Elytra* at base wider than prothorax, and rather more than twice as wide about the middle, subobliquely dilated to near the middle, and then rounded to apex. *Metasternum* lightly convex. Abdomen with fourth segment bidentate. *Legs* long; hind coxae rather widely separated; front trochanters triangularly dentate. Length, $1\frac{3}{4}$ mm.

♀ Differs in having abdomen simple, and legs somewhat shorter, with the front trochanters unarmed.

Hab.—N. S. Wales: Sydney. (Macleay Museum), Forest Reefs. (A. M. Lea.)

Readily distinguished from most species of the genus by the comparatively small prothorax, large elytra and bidentate abdomen. The second to seventh joints of antennae are practically of even width, and the seventh is not much, certainly not conspicuously so, narrower than the eighth, so that the antennae might almost fairly be regarded as having the joints of subcontinuous width, and with the club rather feebly defined; still it is defined, and this, with the separation of the hind coxae, evidently distinguishes the species

from *Phagonophana*, to several species of which it is rather close in general appearance.

From certain directions the head appears to have a small but very distinct fovea close to each eye; from other directions, however, it appears no more than a very shallow and indistinct impression. The basal foveae of the prothorax are somewhat transverse, closer together and less rounded than usual, and with a feeble connecting impression; the impression continued to connect with a longitudinal impression on each side. The teeth on the fourth abdominal segment of the male are moderately large and close together, and project backwards on the same plane as the rest of the segment; from certain directions they appear to be connected by a basal membrane, but there is no trace of a smaller median tooth.

Scydmaenus tenuicollis, n.sp. or var.

Head and prothorax rather dark reddish-castaneous; elytra about base and basal half of suture not much paler, but decidedly paler elsewhere, and becoming almost flavous posteriorly; legs and palpi flavous. Clothing much as in preceding species.

Head and antennae as in preceding species. *Prothorax* and *elytra* narrower, but otherwise much the same. *Legs* long; hind coxae rather widely separated. Length, $1\frac{3}{4}$ mm.

Hab.—Tasmania: Huon River. (A. M. Lea.)

In general appearance very close to the preceding species, of which it is perhaps a variety, but the prothorax and elytra are slightly narrower, and the latter are somewhat paler. I am acquainted with but a single specimen, evidently a female.

Scydmaenus mastersi, n.sp.

♂ Of a rather dingy castaneous, legs paler, tarsi and palpi flavous. Elytra with sparse and short depressed hairs, prothorax rather densely clothed at the sides in front but sparsely elsewhere, head sparsely clothed and without fascicles.

Head moderately transverse; feebly bilobed between antennae. Eyes rather small and prominent. Antennae moderately long; club distinctly four-jointed. *Prothorax* about as long as wide; base with two strong foveae. *Elytra* rather wide and convex; at base wider than prothorax, and across middle fully twice as wide, sides rather strongly and evenly rounded. *Metasternum* moderately convex. *Legs* moderately long; hind coxae distinctly, but not very widely separated; front tibiae somewhat inflated towards apex. Length, $1\frac{1}{4}$ mm.

♀ Differs in having the metasternum rather more convex, and front tibiae thinner, with the legs in general somewhat shorter.

Hab.—N. S. Wales: Tweed River (Macleay Museum and A. M. Lea); Clarence River, Tamworth (Lea).

Allied to *gulosus*, and with the front tibiae also inflated in the male; but head and prothorax paler, size slightly smaller and clothing sparser, etc. Smaller than the pale form of *dentiventris*, and prothorax different at base. Wider than *rivularis* and prothoracic impressions and colours different. Narrower than *depressus* and *griffithi*, elytra less depressed, and different at base, and prothoracic foveae different.

The colour of the upper surface is usually of a uniform dingy castaneous, but on some specimens the elytra (suture excepted) are slightly paler than the prothorax and head. The seventh joint of the antennae is somewhat larger than the sixth, but is slightly shorter and conspicuously narrower than the eighth. The prothoracic foveae are connected by an impression that is not very distinct, although traceable, from some directions, but very distinct, and apparently deep, from others.

Scydmaenus usitatus, n.sp.

Of a rather bright reddish-castaneous, elytra sometimes slightly paler than head and prothorax; legs and palpi flavous. Elytra with fairly numerous but rather short, suberect pale hairs; prothorax rather densely clothed at sides; head with a distinct but rather loose fascicle on each side of base.

Head moderately transverse; feebly bilobed between antennae. Eyes small and prominent. Antennae moderately long; club conspicuously four-jointed. *Prothorax* slightly longer than wide, base bifoveate. *Elytra* moderately long, at extreme base the width of prothorax, but about once and one-half as wide across middle, sides moderately and regularly rounded. *Legs* moderately long; hind coxae moderately separated; front tibiae with apical half somewhat inflated. Length, $1\frac{1}{4}$ mm.

♀ Differs in having the metasternum more strongly convex; legs somewhat shorter, and front tibiae less inflated towards apex.

Hab.—Tasmania: Stanley, in tussocks at summit of "Nut," Hobart, in moss, Waratah, (A. M. Lea.)

From the preceding species distinguished by having elytra decidedly narrower, with the hind coxae more noticeably separated; the clothing and prothoracic sculpture are also not the same. It

is certainly close to *gulosus*, but the head and prothorax are not shining black as in that species, and the inflation of the front tibiae is somewhat different. It is smaller and hairier than *colobopsis*, more densely clothed than *depressus* and *griffithi*, less depressed; elytra and prothorax not quite the same as base, and antennae somewhat shorter.

The eighth joint of the antennae is fully twice the width of the seventh. The basal foveae of the prothorax are larger and closer together than usual; connecting them is a short impression that appears quite absent from some directions, but from other causes than to appear confluent; the impression is continued to each side, where it joins in with a lateral impression, which, however, is partially concealed by clothing.

One specimen has the metasternum and abdomen almost black.

Scydmaenus pilosicollis, n.sp.

Dark castaneous, elytra slightly paler than prothorax, legs pale castaneous, tarsi and palpi flavous. Elytra with moderately dense, suberect, short, pale hairs; prothorax densely clothed at sides, and sparsely elsewhere; head rather sparsely clothed, but with a loose fascicle on each side of base.

Head moderately transverse; very indistinctly bilobed between antennae. Eyes small and prominent. Antennae moderately long; club four-jointed. *Prothorax* slightly longer than wide; base with two large and almost confluent foveae in middle, and one on each side. *Elytra* with outlines as in preceding species. *Legs* moderately long; hind coxae distinctly, but not very widely separated. Length, $1\frac{1}{4}$ mm.

Hab.—Tasmania: Hobart, from moss, Long Bay, (A. M. Lea.)

Slightly larger, hairier, and with slightly stouter and less conspicuous club than in the preceding species, and prothoracic impressions deeper. Larger, hairier, and wider than *virularis*. Slightly smaller than *colobopsis*, narrower, more convex and more densely clothed, and basal parts of prothorax and elytra not quite the same.

The disc of the pronotum, although not densely clothed, is not glabrous as in so many species of the genus. The seventh joint of the antennae is slightly larger than the sixth, and almost two-thirds of the width of, and somewhat shorter than, the eighth; the latter is somewhat narrower than the ninth, so that the club is not very conspicuously four-jointed, although quite decidedly so. The pro-

thoracic foveae are unusually large, and the lateral ones are partially visible from above; they are all so close together that there is not room for a conspicuous connecting impression, but from some directions the base appears to be conspicuously traversed by a rather deep impression.

Scydmaenus latebricola, n.sp.

Black, under surface piceous; prothorax diluted with red at base; elytra dark castaneous, antennae paler; palpi and legs flavous, knees slightly infuscated. Elytra with rather long, suberect, pale hairs; prothorax densely clothed at sides and glabrous elsewhere; head with a loose fascicle on each side of base, very sparsely clothed elsewhere.

Head slightly longer than wide; very indistinctly bilobed between antennae. Eyes small and prominent. Antennae of moderate length; club conspicuously four-jointed. *Prothorax* distinctly longer than wide; with two round, moderately deep, but not very large foveae, isolated from each other, but each connected with one on the side. *Elytra* moderately long; base distinctly wider than prothorax, and almost twice as wide across middle, sides moderately and evenly rounded. *Legs* moderately long; hind coxae distinctly but not very widely separated. Length, $1\frac{1}{2}$ mm.

Hab.—Tasmania: New Norfolk, in tussocks, (A. M. Lea.)

Very close to *gulosus*, but a trifle larger, club somewhat stouter and shorter, head more densely clothed, prothorax more densely clothed at sides, and elytra darker, with longer clothing. From *clientulus* it differs in being larger and darker, club stouter, and clothing longer and darker. It is rather like a large specimen of the preceding species, but the prothoracic foveae are different, and the hind coxae are a trifle closer together.

The eighth joint of the club is the length of, but slightly narrower than, the ninth, but is fully twice the width of the seventh, the latter is very little larger than the sixth. The lateral foveae of the prothorax are partially visible from above; the impression connecting each with one of the medio-basal foveae is very conspicuous from some directions, but apparently absent from others.

One specimen has the entire upper surface of a dark castaneous.

Scydmaenus walkeri, n.sp.

Bright reddish-castaneous, legs somewhat paler, tarsi and palpi flavous. Elytra with rather short and subdepressed pale hairs;

prothorax sparsely clothed at the sides and glabrous elsewhere; head glabrous, even at the sides.

Head moderately transverse; rounded between antennae. Eyes small and moderately prominent. Antennae moderately long and thin; club distinctly four-jointed. *Prothorax* rather convex, about as long as wide; base bifoveate. *Elytra* rather wide, at base distinctly wider than prothorax, and more than twice as wide across middle; sides rather strongly and evenly rounded. *Legs* long; hind coxae moderately separated. Length, $1\frac{1}{2}$ mm.

Hab.—N. W. Australia: Upper Ord River (R. Helms), Adelaide River (British Museum, from J. J. Walker).

Rather close to *mastersi*, but antennae longer and thinner, and prothorax not quite the same.

At a glance the antennae appear to have the joints of subcontinuous width, but the eighth joint, although distinctly narrower than the ninth, is almost twice the width of the seventh; the latter is distinctly, but not much, larger than the sixth. The prothoracic foveae are rather small; from some directions a fairly distinct connecting impression is visible, but from others it appears to be entirely absent.

Scydmaenus calviceps, n.sp.

Colours and clothing much as in preceding species, except that on the elytra the hairs are slightly shorter.

Head moderately transverse, flattened and almost straight between antennae. Eyes of moderate size and moderately prominent. Antennae rather short; club conspicuously four-jointed. *Prothorax* about as long as wide; base with two rather large round foveae, close together, but without a connecting impression. *Elytra* with outlines much as in preceding species. *Metasternum* rather convex. *Legs* moderately long; hind coxae closer together than usual, although distinctly separated; front tibiae somewhat inflated in male. Length, $1\frac{1}{4}$ mm.

Hab.—N. S. Wales: Tweed River. (A. M. Lea.)

From the many similarly coloured species readily distinguished by the isolation of the prothoracic foveae, and the rather short antennae, with stouter club than usual; the clothing also is decidedly shorter than usual. From the pale form of *gulosus*, which has the foveae similarly isolated, the much shorter antennae are sufficiently distinctive. In appearance it is close to *mastersi*, but is slightly smaller, and antennae shorter, with club decidedly stouter; the prothoracic foveae are also somewhat different. In general ap-

pearance it is very close to the preceding species, but antennae are decidedly shorter, with the ninth and tenth joints distinctly twice as wide as long, instead of not much wider than long. The eighth joint is as long as the ninth, but slightly narrower, and is fully twice the width of the seventh, the latter is scarcely perceptibly larger than the sixth.

Scydmaenus depressus, n.sp.

Bright pale castaneous, suture slightly darker than the rest of the elytra; legs and palpi flavous. Elytra with sparse, subdepressed, pale hairs, prothorax moderately clothed at sides, and glabrous elsewhere; head with a feeble fascicle on each side of base; very sparsely clothed elsewhere.

Head moderately transverse, very feebly bilobed between antennae. Eyes small and prominent. Antennae rather long; club conspicuously four-jointed. *Prothorax* almost as long as wide; base bifoveate. *Elytra* wide and somewhat depressed; base distinctly wider than prothorax, and more than twice as wide across middle; sides strongly and evenly rounded. *Metasternum* more convex than usual. *Legs* long; hind coxae moderately separated; femora subclavate. Length, 1 mm.

Hab.—South Australia (Macleay Museum), Adelaide, (H. H. D. Griffith).

A small depressed species with comparatively wide elytra, long antennae and legs, and short clothing. It is fairly close to *mastersi*, but is more depressed, and the antennae are stouter, with the club shorter. It is rather wider than *calviceps*, and the prothoracic impressions are different.

The eighth joint of the antennae is feebly transverse, about twice the width of the seventh, and slightly narrower than the ninth, the latter in turn being slightly narrower than the tenth; the eleventh is briefly ovate, and very decidedly shorter than the two preceding combined; the seventh is very little larger than the sixth, the basal foveae of the prothorax are rather more widely separated than usual; connecting them is an impression that is only moderately distinct from some directions, but which from others causes the base to appear transversely sulcate.

Scydmaenus griffithi, n.sp.

Dark castaneous, elytra (suture excepted) generally somewhat paler; under surface piceous or black; legs and palpi castaneous.

Elytra with not very numerous and rather short, subdepressed, pale hairs; prothorax moderately clothed at sides, great portion of disc glabrous; head sparsely clothed, without basal fascicles.

Head about as long as wide; feebly bilobed between antennae. Eyes of moderate size and rather prominent. Antennae long and rather thin; club conspicuously four-jointed. *Prothorax* slightly longer than wide; base with two foveae of moderate size, and connected by a rather strong impression. *Elytra* moderately long, base slightly wider than prothorax, and almost twice as wide across middle; sides moderately and evenly rounded. *Legs* moderately long; hind coxae distinctly but not very widely separated; front tibiae dilated to apex in male. Length, 1 1/6 mm.

Hab.—South Australia: Adelaide, (H. H. D. Griffith.)

Darker than the preceding species, with longer antennae and with narrower and longer elytra; the suture is subdepressed towards the base, as it is also in that species, although this character is not of much use in distinguishing species. It is a trifle larger than *rivularis*, joints of club more rounded, prothoracic foveae less sharply defined, more distant, and with a feeble connecting depression; and the head and prothorax not shining black as in that species. The antennae are decidedly longer and thinner than in *usitatus*. The head has a shallow impression close to each eye, but from certain directions each of the impressions appears like a small fovea, much as in *amplipennis*, a species which otherwise it has little in common with.

One female has the body entirely pale castaneous, with the appendages flavous, but it is probably immature.

Scydmaenus fuscipalpis, n.sp.

Dark castaneous, suture still darker, under surface black, femora deeply infuscated, tibiae and palpi paler, tarsi flavous. Clothing much as in the preceding species, except that the entire disc of the pronotum is glabrous, and that the head has a loose fascicle on each side of the base.

Head moderately transverse; very indistinctly bilobed between antennae. Eyes small and prominent. Antennae long and moderately thin; club four-jointed. Prothorax distinctly longer than wide, base bifoveate. *Elytra* somewhat depressed; outlines as in preceding species. Legs moderately long; hind coxae moderately separated. Length, 1 1/4 mm.

Hab.—S. Australia: Adelaide (H. H. D. Griffith).

Like an enlarged form of the preceding species, but darker, even as to the legs, it is one of the very few species whose palpi are not entirely flavous.

The club is distinctly four-jointed, the eighth joint of the antennae, however, is distinctly narrower and more rounded than the ninth, and scarcely twice the width of the seventh, the latter is slightly larger than the sixth; the eleventh is almost as long as the ninth and tenth combined. The basal foveae of the prothorax, are fairly large, close together, and with a connecting impression, that is always traceable, but varies in apparent depth with the point of view.

Scydmaenus evanidus, n.sp.

Of a rather bright castaneous, antennae somewhat paler; legs and palpi flavous. Elytra with short, sparse pale, depressed hairs (almost pubescence); prothorax sparsely clothed at sides, and glabrous elsewhere; head almost glabrous, without basal fascicles.

Head moderately transverse; gently rounded between antennae. Eyes rather small and moderately prominent. Antennae long and rather thin; club conspicuously four-jointed. *Prothorax* somewhat depressed, slightly longer than wide; base bifoveate. *Elytra* depressed, base distinctly wider than prothorax and about twice as wide across middle; sides moderately and evenly rounded. *Metasternum* rather lightly convex. *Legs* moderately long; hind coxae moderately separated. Length, 4/5th mm.

Hab.—N. S. Wales: Tamworth (A. M. Lea).

A minute, depressed species, with thin antennae. In general appearance it is close to *Scydmaenilla pusilla*, but antennae with the club four-jointed, and hind coxae distinctly separated.

The eighth joint of the antennae is scarcely, if at all, narrower than the ninth, and twice the width of the seventh; the latter is slightly but noticeably larger than the sixth. The prothoracic foveae are round and rather deep, but not very large, from some directions they appear to be isolated, but from others a faint connecting impression is traceable.

Scydmaenus rivularis, n.sp.

Black; elytra and extreme base of prothorax deep reddish-castaneous; antennae and abdomen somewhat paler; legs and palpi flavous. Elytra with fairly numerous and rather short, subdepressed, pale hairs; prothorax densely clothed at sides and glabrous elsewhere; head sparsely clothed; each side of base with a feeble fascicle.

Head lightly transverse; feebly bilobed between antennae. Eyes small and prominent. Antennae moderately long and not very thin; club conspicuously four-jointed. *Prothorax* slightly longer than wide; base with two rather small, round, deep foveae, close together, but without a connecting impression; each side with a small fovea, also isolated from the median ones. *Elytra* rather long, base not much wider than prothorax, and not twice as wide across middle, sides moderately and evenly rounded. *Legs* moderately long; hind coxae distinctly but not widely separated; tibiae somewhat stouter in male than in female. Length, $1\frac{1}{4}$ mm.

Hab.—Victoria; N. S. Wales: Sydney (Macleay Museum), Nepean River (A. J. Coates), Tweed, Clarence, Hawkesbury and Peel Rivers, abundant in flood debris (A. M. Lea).

The prothoracic foveae are more sharply defined and closer together than usual. The colours are much as in *gulosus*, but that species is somewhat larger and wider, prothoracic foveae separated almost twice the distance, base of elytra not quite the same, and joints of club more globular. *Paramattensis* is also larger and wider, antennae longer, and club and base of elytra different. The eighth joint of the antennae is very decidedly narrower than the ninth, although almost twice the width of the seventh.

On an occasional specimen the metasternum is not much darker than the elytra; and one specimen has the entire body pale castaneous, with the appendages still paler, but it is probably immature.

Scydmaenus foveidistans, n.sp.

♂ Dark castaneous; metasternum almost or quite black; legs and palpi flavous, antennae somewhat darker. Elytra with moderately numerous, short, subdepressed hairs, prothorax not very densely clothed at sides and sparsely elsewhere, only middle of disc glabrous; head sparsely clothed, basal fascicles very feeble and indistinct.

Head about as long as wide; gently rounded between antennae. Eyes small and prominent. Antennae moderately long; club conspicuously four-jointed. *Prothorax* about as long as wide; base bifoveate. *Elytra* moderately long, extreme base no wider than prothorax, and across middle less than twice as wide; sides rather lightly and evenly rounded. *Metasternum* rather lightly convex. *Legs* moderately long; hind coxae distinctly but not widely separated; front coxae inflated. Length, 1 mm.

♀ Differs in having the metasternum more convex, the appendages somewhat shorter, with the front tibiae thinner.

Hab.—N. S. Wales; Nepean River (A. J. Coates), Tamworth, Windsor (A. M. Lea).

Smaller, darker, wider and more depressed than the preceding species, and prothoracic impressions different; the basal foveae are rather small and widely separated, but with a connecting impression that appears very distinct from some directions, although rather feeble from others. It is considerably smaller than *mastersi*, *usitatus* and *gulosus*.

The eighth joint of the antennae is about twice the width of the seventh, and almost the width of the ninth. The front coxae of the male are distinctly inflated from near the base to near the apex, but then decrease to the apex itself, as a result their outer edge has a somewhat rounded outline.

One specimen has the elytra darker than the prothorax, a reversal of the usual colours in species of the genus.

Scydmaenus appropinquans, n.sp.

Very dark brownish castaneous, elytra (suture excepted) generally slightly paler; metasternum black; abdomen usually black, but tip obscurely diluted with red; antennae and legs of a rather dingy pale castaneous, tarsi and palpi paler, but scarcely flavous. Elytra with short, sparse, depressed hairs or pubescence; prothorax rather sparsely clothed at sides, and glabrous elsewhere; head almost glabrous, without basal fascicles.

Head about as long as wide, very indistinctly bilobed between antennae. Eyes small and not very prominent. Antennae slightly longer, but otherwise much as in preceding species. *Prothorax* about as long as wide; base with two sharply defined foveae of moderate size, closer together than usual, and with a very feeble connecting impression. *Elytra* subdepressed and rather wide; base distinctly wider than prothorax, and about twice as wide across middle; sides rather strongly and evenly rounded. *Legs* moderately long; hind coxae lightly but distinctly separated, front tibiae somewhat stouter in male than in female. Length, 1 mm.

Hab.—W. Australia: Vasse River, in flood debris (A. M. Lea).

Close to *rivularis*, but somewhat smaller, prothoracic foveae somewhat different, antennae shorter, and joints of club smaller. Also close to the preceding species, but prothoracic foveae larger

and much closer together, with the connecting impression scarcely traceable from certain directions, and not at all from others.

The elytra, although always dark, are usually somewhat paler than the head and prothorax.

A specimen in the Macleay Museum, from Victoria, is very close, to if not identical with this species; its elytra are rather darker, but I can find no other differences.

Scydmaenus atrophus, n.sp.

Bright castaneous, antennae and legs somewhat paler, tarsi and palpi flavous. Elytra with rather short, sparse, pale, depressed hairs or pubescence; prothorax sparsely clothed at sides, greater portion of disc glabrous; head very sparsely clothed, a few hairs on each side at base, but scarcely forming fascicles.

Head lightly transverse; feebly bilobed between antennae. Eyes small and prominent. Antennae rather long; club conspicuously four-jointed. *Prothorax* somewhat depressed, and slightly longer than wide; base bifoveate. *Elytra* long, at extreme base no wider than prothorax, and scarcely once and one-half across middle; sides gently and evenly rounded. *Metasternum* rather longer than usual, and moderately convex. *Legs* moderately long; hind coxae distinctly but not very widely separated; front tibiae rather stouter in male than in female. Length, 1 mm.

Hab.—W. Australia: Swan and Vasse Rivers (A. M. Lea).

A small, narrow species, in build close to the preceding species, but slightly narrower, much paler and prothoracic impressions different; the basal foveae are distinctly transverse, rather large, distinctly (at least from certain directions) connected with one on each side, but indistinctly connected with each other. It is smaller and distinctly narrower than *duplicatus* and *griffithi*, and the prothoracic impressions are different. It is much the size and colour of *Scydmaenilla pusilla*, but the club and hind coxae are different.

The eighth joint of the antennae is twice the width of the seventh, and fully as wide as the ninth.

Phagonophana suturalis, n.sp.

Dark reddish-castaneous; elytra (suture excepted) and appendages paler. Rather densely clothed with moderately long, sub-erect, stramineous hairs.

Head moderately long. Eyes small, latero-frontal and prominent. Antennae fairly stout, passing middle coxae, joints of sub-continuous width. *Prothorax* slightly longer than wide; base with irregular foveae, partially obscured by clothing. *Elytra* at extreme base the width of prothorax, but considerably wider across middle, sides strongly and evenly rounded; each side of base with two rather large impressions, of which the inner one is the smaller; narrowly striated on basal fourth close to suture; with small, irregularly distributed and usually indistinct punctures. *Legs* stout and rather long; hind coxae almost touching; femora not pedunculate. Length, 2 mm.

Hab.—Tasmania: Mount Wellington, in moss (A. M. Lea).

Considerably smaller and somewhat narrower than *latipennis*, with denser and paler clothing, and femora approaching the normal. It is stouter than the following species, antennae stouter, clothing denser and longer, and elytra with sides regularly rounded.

The clothing is denser on head and sides of prothorax than elsewhere, on the head almost entirely concealing its sculpture. The eyes are on a lower plane than usual, so that, although distinctly projecting from their surroundings, they are not very conspicuous from above. The second joint of the antennae is shorter than the first, but longer than the third, the latter is about as long as wide, but with the front edge narrowed to its junction with the fourth, the fifth to tenth have their apices similarly narrowed,¹ the tenth is about twice as wide as the third, but the intervening joints so regularly decrease in size, that the antennae cannot be regarded as having a club; the eleventh joint is subconical, and slightly longer than the two preceding combined. Close to the base and immediately on each side of the suture there is impressed a very fine stria, immediately outside of which there is a still finer stria, which is continued for a short distance beyond the first; but they are rather indistinct from some directions. Seen from the direction of the head the hind coxae appear rather widely separated, but when examined from along the abdomen they are seen to be almost touching.

Phagonophana abundans, n.sp.

♂ Dark castaneous, elytra, abdomen and appendages somewhat paler, palpi and tarsi flavous. Moderately clothed with not very long, suberect, stramineous hairs.

1. Similarly shaped joints in the *Pselaphidae* are described by M. Raffray as trapezoidal.

Head moderately long, with a small and rather shallow impression close to each eye. Eyes small, latero-frontal and prominent. Antennae rather long and thin; second to sixth joints of even width, the others slightly and regularly increasing in width, and not distinctly clubbed, eleventh subconical, slightly longer than two preceding joints combined. *Prothorax* strongly convex, and very decidedly longer than wide; base with four impressions, the two outer marginal and longitudinal, but partially visible from above, the two inner round and fairly large foveae; the space between them appearing almost as a carina. *Elytra* at extreme base the width of prothorax, sides strongly obliquely dilated to the basal two-fifths, where the width is more than twice that of the prothorax, then rounded, and then somewhat oblique to apex; each side of base depressed, the depression causing each side to appear like a small projecting tooth; with sparse, rather small, and more or less concealed punctures. *Metasternum* somewhat flattened across middle of apex. Abdomen with fourth segment having a strong raised double ridge on each side of middle, the middle of its apex excavated, and with a smaller ridge or tooth. *Legs* long; hind coxae moderately separated; femora subclavate. Length, 1 4/5-2 mm.

♀ Differs in having metasternum more convex, abdomen simple, and appendages somewhat shorter.

Hab.—Tasmania: New Norfolk, Hobart, Mount Wellington, numerous specimens from moss and several from fallen leaves.

Seen from the side the fourth abdominal segment of the male appears to have on each side of its middle, a strongly elevated narrow ridge, highest towards its base, with its basal end vertical, and with its apex projecting as a truncated tooth beyond the apex of the segment. From an oblique direction each ridge is seen to be distinctly double, with the separate parts conjoined at apex. Seen directly from behind each appears as two narrow vertical teeth.

Phagonophana hirticeps, n.sp.

Moderately dark castaneous, elytra slightly paler, legs slightly paler still, tarsi and palpi almost flavous. Clothing much as in preceding species, except that it is denser on the head.

Head moderately wide. Eyes small, latero-frontal and prominent. Antennae long and rather thin, second joint slightly shorter than first, slightly stouter than third and almost as long as third and fourth combined, third to sixth of even width, the others slightly and regularly increasing in width, eleventh subconical,

slightly longer than ninth and tenth combined. *Prothorax* strongly convex, distinctly longer than wide, widest across apical third; near base with two rounded foveae, the space between almost carinated. *Elytra* with outlines much as in preceding species; a narrow stria close to each side of the suture on the basal fifth; punctures sparse and indistinct. *Legs* long and rather stout; hind coxae rather widely separated. Length, $2 \frac{1}{6}$ mm.

Hab.—Tasmania: Southport (A. M. Lea).

In general appearance close to the preceding species, but antennae stouter, elytra less suddenly inflated, and the shades of colour of prothorax and elytra less strongly defined. The separation of the hind coxae is also more noticeable, but the two species are so obviously close together that it is inadvisable to generically separate them, although the separation is certainly more pronounced than in any other species of *Phagonophana*.

Phagonophana crassipes, n.sp.

Colour and clothing as in *abundans*, except that on the head and prothorax the clothing is denser.

Head moderately long, with fairly numerous but more or less concealed punctures. Eyes small, latero-frontal, and moderately prominent. Antennae moderately long and not very thin, joints of subcontinuous width, eleventh joint subconical, as long as ninth and tenth combined. *Prothorax* rather strongly convex, distinctly longer than wide, widest across apical third; base with four strong impressions. *Elytra* at extreme base no wider than base of prothorax, but almost twice as wide across middle, sides strongly and evenly rounded; each side of base with two impressions, appearing confluent from some directions; with small, and rather sparse, more or less obscured punctures. *Legs* long and rather stout; hind coxae almost touching; femora not pedunculate. Length, $1 \frac{3}{4}$ mm.

Hab.—Tasmania (Macleay Museum and H. H. D. Griffith), Hobart, Mount Wellington, in moss (A. M. Lea).

Somewhat smaller than *abundans* and clothing shorter, and elytra more regularly rounded and different at base; the basal impressions on the prothorax are much the same, but they are partially obscured by the clothing. The antennae are somewhat shorter than in the three preceding species, the ninth and tenth joints are fully twice as wide as long, the others gradually decrease in width, so that the third is just perceptibly transverse.

When viewed straight from behind the hind coxae are seen to be slightly separated, but from other directions they appear to be touching.

Phagonophana pedunculata, n.sp.

Of a rather dark reddish-castaneous, abdomen and legs somewhat paler, tarsi and palpi almost flavous. Elytra moderately clothed with not very long, subdepressed, stramineous hairs, denser on head and sides of prothorax; disc of the latter glabrous.

Head moderately wide. Eyes small, latero-frontal and prominent. Antennae moderately long and not very thin. *Prothorax* moderately convex, slightly longer than wide; base with four impressions. *Elytra* at base distinctly wider than prothorax, and almost twice as wide across middle. sides rather strongly and evenly rounded; with moderately sparse and small punctures. *Legs* long and rather thin; hind coxae touching; hind femora pedunculate, the others much less so. Length, $1\frac{1}{2}$ mm.

Hab.—N. S. Wales: Sydney (Macleay Museum), Clarence River (A. M. Lea).

Rather close to the preceding species, but slightly smaller, antennae a trifle longer (although stouter than most species of the genus), prothorax with the basal impressions somewhat different; and legs longer and of different shape.

The third to fifth joints of antennae are of even width, the sixth is a trifle wider, the seventh is rather suddenly, although not much, wider than the sixth, the others feebly and regularly increase in width, so that it is somewhat difficult to decide as to whether the antennae should be regarded as having the joints of sub-continuous width or as having a five-jointed club. The four basal impressions of the prothorax consist of two rather small median foveae, and a longitudinal impression on each side, connecting them all is an impression that appears rather feeble from some directions, but from others appears almost as a deep continuous groove. The elytral punctures, although small, are fairly distinct where the surface has been abraded.

The pedunculate femora, contiguous hind coxae and joints of antennae of subcontinuous width, or almost so, would appear to denote that this species belongs to *Phagonophana*. Two of the main characters, relied upon by King for distinguishing that genus from others, are the biarticulate labial palpi, and mandibles with two teeth and membranous edge; but to see these it is necessary to

mount specimens, after treatment, in Canada balsam, and such treatment destroys specimens for ordinary examination; so that where but few specimens are available it is not advisable to so treat them. While not contending that hidden characters should never be used for the definition of genera, it certainly appears preferable to use such characters as can be made out by the use of an ordinary lens, or by aid of the microscope, without the destruction of type specimens.

Phagonophana parvicollis, n.sp.

Bright castaneous, abdomen tarsi and palpi somewhat paler. Moderately clothed with not very long, subdepressed, stramineous hairs or pubescence, disc of prothorax glabrous.

Head about as long as wide. Eyes rather small, latero-frontal and moderately prominent. Antennae moderately long. *Prothorax* moderately convex, slightly longer than wide; base with four moderate impressions. *Elytra* at base distinctly wider than prothorax, and fully thrice as wide across middle; sides strongly and evenly rounded, each side of base with two impressions; punctures rather dense and distinct. *Legs* long and rather thin; hind coxae touching; four hind femora pedunculate. Length, $1\frac{1}{2}$ mm.

Hab.—N. S. Wales: Sydney, Ourimbah (A. M. Lea).

The prothorax is unusually small in comparison with the elytra, a character which at once distinguishes it from the preceding species.

The elytra have a few rather long hairs scattered amongst the ordinary ones, but they are not very distinct except from the sides. The second joint of the antennae is distinctly longer than the third, the latter is briefly cylindrical, the fourth to sixth are more or less globular, and of even width, the seventh is slightly longer and distinctly wider than the sixth, the others gradually increase in size, and, as also the seventh, are more or less trapezoidal; the eleventh is subconical and distinctly shorter than the ninth and tenth combined. The antennae therefore could fairly be regarded as having a rather loose five-jointed club, although at a glance the joints appear to be of subcontinuous width. The medio-basal impressions of the prothorax are transverse, the lateral ones are oblique, and all are more or less feebly connected together by a transverse impression. The elytral punctures are quite distinct, even before abrasion.

Phagonophana anthicoides, n.sp.

Of a uniform and bright castaneous, tip of abdomen, tarsi and palpi very little paler. With short, depressed, and rather sparse, stramineous hairs or pubescence.

Head distinctly transverse; with a short transverse antennary ridge on each side, and a small fovea behind each ridge. Eyes rather small, latero-median and prominent. Antennae not very long, joints of subcontinuous width. *Prothorax* somewhat depressed, distinctly longer than wide, widest close to apex; base with two small foveae and a more distinct one on each side, although only partially visible from above. *Elytra* depressed, base wider than base of prothorax, but not wider than near its apex, sides moderately rounded and widest at about basal two-fifths; with fairly numerous, and, for the genus, rather coarse punctures on basal half, becoming smaller posteriorly. *Legs* moderately long; hind coxae feebly separated; hind femora decidedly pedunculated, the others much less noticeably so. Length, 1 $\frac{2}{3}$ mm.

Hab.—N. S. Wales: Sydney, Glen Innes (A. M. Lea).

A depressed species, in general appearance like several species of *Heterognathus*, but the hind coxae are almost touching. The elytral punctures are stronger than in the preceding species. The shape and general appearance are decidedly suggestive of some of the pale species of *Anthicus*.

The second to sixth joints of antennae are of even width, the others regularly increasing in width, but as the ninth and tenth, in addition to being wider, are somewhat longer than the seventh, the antennae might be regarded as having a three-jointed club; the eleventh joint is subconical, and almost as long as the ninth and tenth combined.

Phagonophana ovipennis, n.sp.

Of a rather dark reddish-castaneous, abdomen and appendages somewhat paler, tarsi and palpi almost flavous. Moderately clothed with suberect and moderately long stramineous hairs, becoming dense on sides and base of prothorax, and of head.

Head rather long and thin; with a somewhat obscured depression close to each eye. Eyes small, latero-frontal and moderately prominent. Antennae moderately long. *Prothorax* about once and one-half as long as wide; base with four rather large foveae. *Elytra* elongate-ovate, extreme base the width of prothorax, across middle almost twice the width, sides regularly rounded; punctures small,

sparse and indistinct. *Legs* long and moderately stout; hind coxae lightly separated; femora scarcely pedunculate. Length, $1\frac{1}{2}$ mm.

Hab.—Tasmania: Waratah, in moss (A. M. Lea).

The eleventh joint of the antennae is subconical, distinctly wider than tenth, and about as long as ninth and tenth combined, these are strongly transverse with the ninth narrower than the tenth, the eighth and seventh regularly decrease in width, so that, although the antennae might fairly be regarded as having a three-jointed club, they might just as fairly be regarded as having the joints of subcontinuous width. The basal foveae of the prothorax are rather large and close together, the lateral ones being partially visible from above, but they are all partially obscured by clothing. The hind coxae are so close together that it is only from certain directions that they can be seen to be separated.

This and the following are peculiarly narrow, convex species, and it is possible that they should be regarded as belonging to a new genus, but as their maxillary palpi and hind coxae appear to be as in *Phagonophana*, and as I have seen but a single specimen of each, it is certainly inadvisable to treat them so as to render the mouth parts visible.

Phagonophana tenuis, n.sp.

Bright castaneous, appendages somewhat paler. Rather lightly clothed with short depressed hairs or pubescence.

Head (including neck) about twice as long as wide, with a short transverse antennary ridge on each side in front. Eyes very small and latero-frontal. Antennae moderately long. *Prothorax* distinctly longer than wide, sides lightly and uniformly rounded; base with four small foveae, the median ones rather close together, the lateral ones partially concealed from above. *Elytra* and *legs* much as in preceding species. Length, $1\frac{1}{4}$ mm.

Hab.—Tasmania: Mount Wellington, in moss (A. M. Lea).

In appearance like a pale miniature specimen of the preceding species, but base of prothorax with smaller foveae, terminal joints of antennae differently proportioned and clothing shorter and sparser, etc.

The antennae should perhaps be regarded as having the joints of subcontinuous width, but if regarded as clubbed it would not be easy to decide whether the club consists of two or of three joints. The eleventh is decidedly larger than usual, being considerably wider than the tenth, and as long as the three preceding com-

bined, the tenth is short, strongly transverse, and distinctly wider than ninth, the latter is moderately transverse and somewhat larger than the eighth.

Coatesia, n.g.

Head small, partially concealed from above. Eyes small, medio-lateral and rather prominent. Antennae moderately long, clubbed at apex. Maxillary palpi apparently three-jointed, but fourth joint small and conjoined to apex of third, causing the latter to appear rather large. Labial palpi minute. *Prothorax* strongly transverse. *Scutellum* minute. *Elytra* wide. *Mesosternum* with an acute intercoxal keel. *Metasternum* moderately long. Abdomen about as long as meso- and metasternum combined. *Legs* rather long and thin; hind coxae moderately separated; tibiae feebly dilated to apex; tarsi very thin.

The minute species upon which it is proposed to found this genus is much wider in proportion than any other of the family actually known to me, or that I have seen figured. Its prothorax also is without any trace of the medio-basal foveae so common in the family, although the lateral ones are present.

I cannot speak as to its position in the family generally, but amongst the genera occurring in Australia it should be placed next to *Megaladerus*, from which it differs in having prothorax decidedly wide, and hind coxae much closer together.

Coatesia lata, n.sp.

Bright reddish-castaneous, tip of abdomen, tarsi and palpi somewhat paler. Clothed with moderately dense, not very long, depressed stramineous pubescence.

Head across eyes less than half the width of base of prothorax. Antennae passing middle coxae, seven basal joints rather thin, eighth slightly larger than seventh, ninth distinctly larger than eighth, but not very large, tenth transverse, distinctly longer and wider than ninth, eleventh large, wider than tenth, and as long as three preceding combined. *Prothorax* moderately convex, fully twice as wide as long, sides strongly rounded in front and almost parallel towards base, base more than twice the width of apex; hind angles flattened, and each with a vague foveate impression; punctures minute and partially concealed. *Elytra* about once and one-third as long as wide, widest at extreme base, which is closely applied to, and the exact width of base of prothorax, sides feebly

diminishing in width to near apex, and then strongly rounded; each side of base with a fairly large depression; with dense, small and partially concealed punctures. Length, 1 mm.

Hab.—N. S. Wales; Nepean River (A. J. Coates), Clarence River, in flood debris (A. M. Lea).

The elytral punctures, although small, are fairly distinct, where, through abrasion, they can be closely examined.